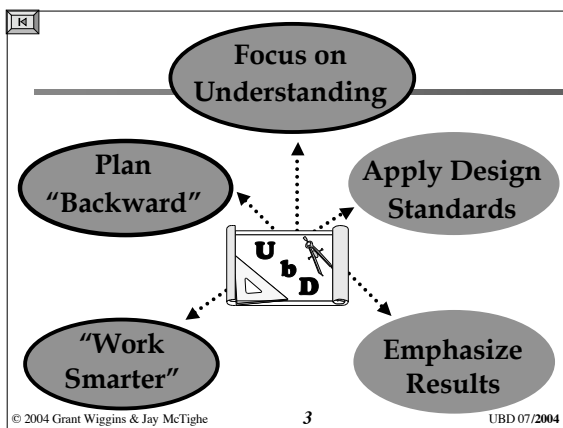
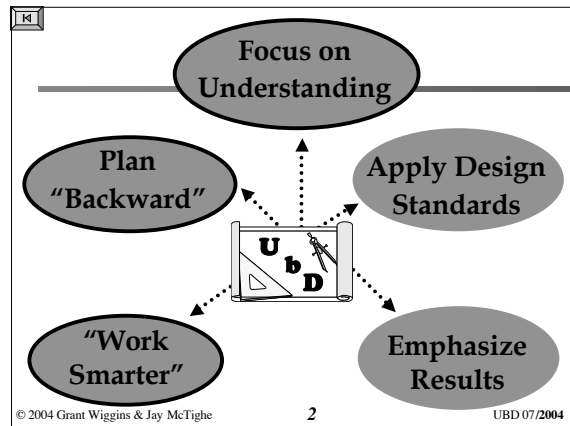


Leading by Design

Jay McTighe & Grant Wiggins
Dallas 2004

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3 Stages of Backward Design

1. Identify desired results.
2. Determine acceptable evidence.
3. Plan learning experiences & instruction.

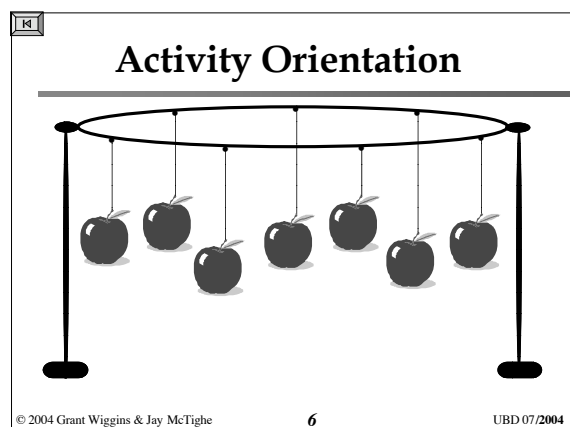
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The UbD Template...

- ✓ embodies the three stages of backward design
- ✓ provides a common format for creating and sharing curricular designs

Standard(s)	
Understandings	Essential Questions
Assessment Evidence	
Learning Activities	

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"Coverage" Orientation

September ----- June

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Content standards are the goals, not text coverage.

Use the textbook as a *resource* -- not the syllabus!

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The UBD 1-page template

Standards	Essential Questions
Understanding	
Assessment Evidence	
Learning Activities	

fosters alignment:

- ✓ content standards
- ✓ 'big ideas'
- ✓ essential questions
- ✓ assessments
- ✓ learning activities

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The challenge: align goals, assessments, lessons

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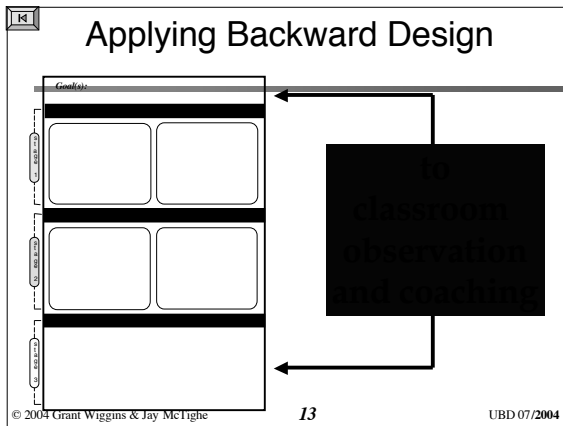
Applying Backward Design

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Essential Questions for Staff ?

- How would people know that we are a "standards-based" school?
- What content must we "cover" and what should we "uncover"?
- Are we assessing everything we value (or just that which is easiest to test and grade)?
- How can our assessments promote learning, not just measure it?

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Reflective Questions for Staff

Stage 1

- *What do you want students to come to understand?*
- *What do you want students to know and be able to do?*
- *How will students come to know what they will be learning?*

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Reflective Questions for Staff

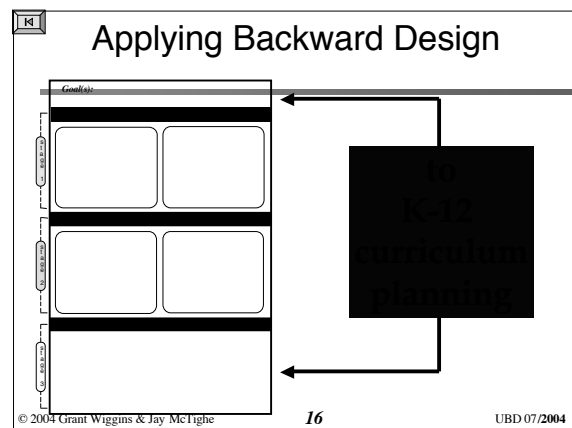
Stage 2

- *What evidence will you collect to determine if students have achieved the desired results?*

Stage 3

- *In what ways will you help students learn this?*

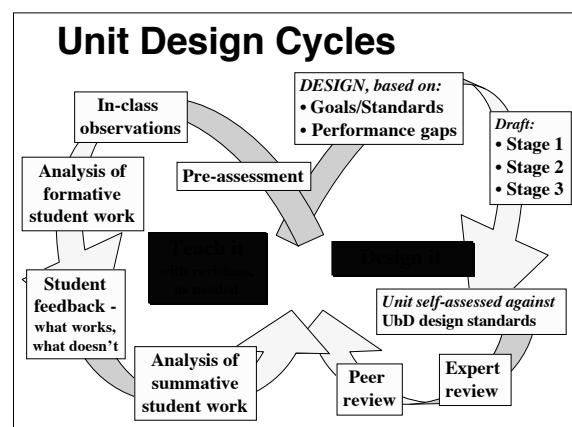
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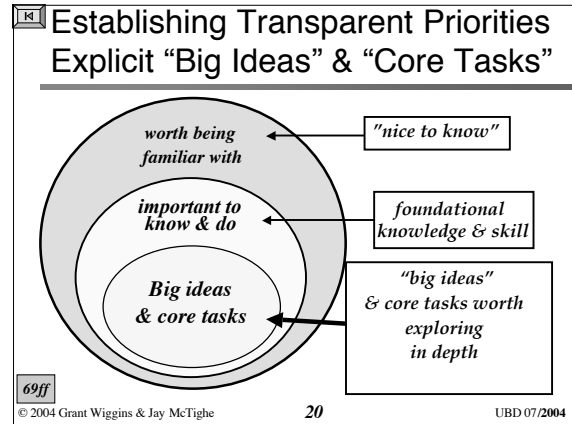
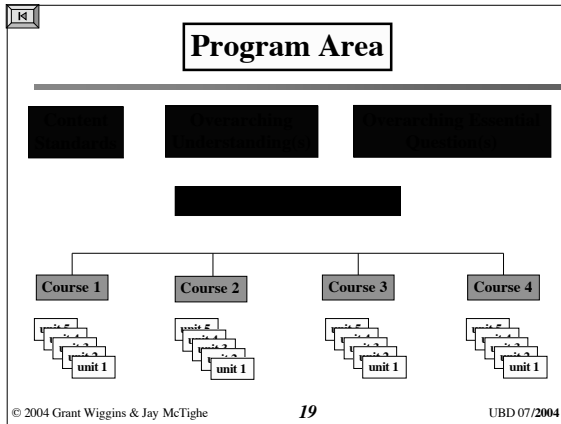


Summary of good design...

- Clear goals and explicit performance requirements
- Many models and modeling provided
- A genuine challenges/problem frames work that stretches you - real, meaningful work, with meaningful purpose/audience/situation (Authentic assessment)
- Trial and error, reflection and adjustment are expected, encouraged and designed in to the syllabus
- The teacher is more of a facilitator, coach
- Transparency - clarity about the big picture and how current work relates to it
- There is a safe, supportive environment for risk-taking, giving and getting feedback
- Variety, choice, and attention to difference are designed in to all work
- A good mix of group/solo work, collaboration/competition designed in
- Active, Immersion, multi-sensory experience - not too verbal

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“Core Tasks” provide performance priorities

What do the discrete skills and facts enable?

- What is a credible answer to: “Why are we learning this? What does it help you do?”
- What *complex tasks* do people out in the world get called upon to do - on their own? What are the kinds of challenges and conditions they face in the field?
- What work in the field requires *transfer* - the thoughtful use of a *repertoire*, (as opposed to just cued, simple plug-in or rote response)?
- Is this the kind of task that *can and must recur* K-12 because it is the essence of the ability or program goal?

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Core tasks, cont.

- Ask:
 - What does it mean to *do* the subject, to have your abilities ‘tested’ in the world?
 - What are authentic options, constraints, and opportunities when doing such work?

What are the key genres of performance in your subject(s)?

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Don’t confuse the drills with the game (authentic performance)

‘Drill-tests’ - test items/exercises

- Out of context
- Discrete, isolated element
- Unrealistically set up and prompted
- Doesn’t transfer without practice adapting it to the game itself

The ‘game’ - real task, problems

- In context, with all its messiness and interest value
- Requires a repertoire, used wisely
- Not prompted: you judge what to do, when

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Core transfer tasks

Examples from various fields:

- Crafting your own narrative about what happened, despite conflicting and incomplete accounts (social studies)
- Successfully writing to a real audience, to achieve a real purpose (lang. arts)
- Figuring out, on your own, what an author might have meant, and saying why (humanities courses)
- Developing models, based on what you see as a pattern, in realistically *messy* phenomena (math, science, social science)
- Speaking to *different* audiences and purposes, including highly challenging situations, with poise and polish (many subjects)

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Transfer tasks: examples

History

- Make sense of multiple and incomplete primary & secondary sources (e.g. playground fight)
- "How did we get here?" - the history of a present problem/issue/event (e.g. 9/11)
- Build a single coherent and supported "story" out of conflicting facts & artifacts
- Dig beneath national myths to get at the unvarnished truth

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Transfer tasks: examples

Science

- Design and de-bug a worthy experiment from scratch
- Critically evaluate the research of others - peer review
- Show evidence of having carefully considered the ethics of scientific research
- Adapt research to practical solutions/inventions
- Propose and design tests of a novel idea

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The Questions & Tasks ARE the core curriculum, not the content!

Framing curricula around questions & tasks helps clarify priorities for learners and teachers

- Don't confuse 'teaching via questions' with *framing* a curriculum and assessment system on penetrating and important questions in each field
- Don't confuse the state's role as auditor with the local role of designing excellent assessment that does justice to the Standards

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Framing a course in World History by tasks:

1. The design of a tour of the world's most holy sites
2. The writing of a Bill of Rights for use in Afghanistan, Iraq, and other new democracies
3. Report on Latin America to the Secretary of State: Policy analysis and background report on a Latin American country. What should be our current policy, and how effective has recent policy with that country been?
4. Collect and analyze media reports from the Internet on other countries' views of US policies in the Middle East. Do we understand the issues?
5. Provide a briefing on the AIDS crisis in Africa and how American policy has helped as well as hurt the situation
6. Take part in a model UN on the issue of terrorism: you will be part of a group of 2-3, representing a country, and you will try to pass a Security Council resolution on terrorism
10. Russia: friend or foe? Provide the Foreign Relations Committee with a briefing on the current state of Russia, the last century of American-Russian relations, and future worries and possibilities
11. India and outsourcing: to what extent is the global economy a good thing for America? India? India's neighbors?

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Essential Questions for Eng/LA-

- When should I talk? When should I listen? How do I know?
- In the case of misunderstanding, how can I tell when it's me and when it's them? What can I do to fix the problem?
- Have I understood the real message? How do I know? What does the feedback and body language suggest? What *isn't* being said that is the real message?
- What should I do when I don't understand?
- Have I been unintentionally unclear? Rude? How do I know?
- What are the most common but hard-to-spot causes of communication breakdowns? How can I tell when others understand me? What can I do when they are confused?
- What do good speakers do? Are there any consistent aspects to excellent performance, given so many distinctive styles?
- How does the audience affect the way I should speak?
- In what ways does effective speaking require an interaction with the audience?
- Have I been clear? Effective? How do I know?

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NEW HOPE-SOLEBURY SCHOOL DISTRICT Curriculum Map			
Course Title: Unit(s) of Study:	Month: December		
UNIT (S) OBJECTIVES <small>What were the learning objectives for this unit(s)?</small>	PERFORMANCE INDICATORS <small>What did students do to evidence achievement of the objectives?</small>	INSTRUCTIONAL MATERIALS <small>What instructional materials were used for this unit(s)?</small>	STANDARD REFERENCE <small>What state or national standards were addressed in this unit(s)?</small>
No Old Model. No longer in use.			

Understanding By Design

New Hope-Solebury School District Social Studies Curriculum Framework			
National and State Standards Guiding Program			
<p>National Council for the Social Studies (NCSS)</p> <p>I. Culture</p> <p>a. Compare similarities and differences in the ways groups, societies, and cultures meet human needs and concerns.</p> <p>d. Explain why individuals and groups respond differently to their physical and social environments and/or changes to them on the basis of shared assumptions, values, and beliefs.</p> <p>II. Time, Continuity, & Change</p> <p>a. Identify and use key concepts such as chronology, causality, change, conflict, and continuity to explain, analyze, and show connections among patterns of historical change and continuity.</p> <p>VIII. Science, Technology, & Society</p> <p>a. Examine and describe the influences of culture on scientific and technological choices.</p> <p>X. Civic Ideals & Practices</p> <p>a. Examine the origins and continuing influence of key ideals of the democratic and republican form of government.</p>		<p>Enduring Understandings:</p> <ul style="list-style-type: none"> Archaeologists learn about ancient human cultures by studying the artifacts left behind by those cultures. Early people survived by learning to work together and utilizing available resources appropriately. Technology includes all the tools, methods, and materials that people use to control and improve their lives. The culture of a society is the beliefs, customs, traditions, art, and achievements that are passed from one generation to another. Civilizations emerge as a result of 5 basic characteristics: a stable food supply, a form of government, specialization of labor, social levels, and a highly developed culture which includes art, architecture, religion, music, law, and a system of writing. Achievements from ancient civilizations have affected the modern world. The governments of ancient Greece and Rome have influenced the government of the United States. 	
<p>Content Topics</p> <p>District</p> <p>Unit 1: Archaeology, Early Man, and the Development of Societies</p> <p>Unit 2: Ancient Mesopotamia</p> <p>Unit 3: Ancient Egypt</p> <p>Unit 4: Ancient India</p> <p>Unit 5: Ancient China</p> <p>Unit 6: Ancient Greece</p> <p>Unit 7: Ancient Rome</p>		<p>Key Skills</p> <ul style="list-style-type: none"> Reading Comprehension Research Note taking Outlining from notes Oral Presentations Focused Writing Application/Synthesis Map Making Reading Quality Visual Aids Organization Visual graphics forms Essay writing Cooperative learning 	
<p>Essential Questions:</p> <ol style="list-style-type: none"> How have historians and archaeologists learned about the ancient past? How do geographic factors affect and influence the rise of civilizations? What role has technology played in the rise of ancient civilizations? How did cities emerge? How did early people eventually create a stable food supply? What are the various forms of government and how did they affect ancient civilizations? What caused specialization of labor? How did social levels evolve? How does a culture become highly developed? How are the 5 characteristics of a civilization found in ancient Mesopotamia, Egypt, India, China, Greece, and Rome? 		<p>Assessments</p> <p>Oral presentations</p> <p>Essays</p> <p>Reports</p> <p>Simulations</p> <p>Tests & quizzes</p> <p>Maps</p> <p>Timelines</p> <p>Porters</p> <p>Projects</p> <p>Plans</p> <p>Picture books</p> <p>Creative writing—poems, stories</p>	
<p>Connected Co-Curricular Support Activities/Experiences</p> <p>Field trip to University of Pennsylvania Archaeological Museum</p> <p>Civics-Roman Day</p> <p>Guest speakers & presentations</p> <p>Field trips to cultural presentations (e.g. Asia House, Chinese restaurant)</p>			



St. Clement
Catholic
Elementary/Junior High
School



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to teach for understanding is to **coach for transfer**

Transfer requires...

- tasks with *minimal* cues and scaffolding, unlike typical test items: can the learner *imagine* and *judge* which knowledge & skills are required here?
 - Local/classroom assessment is consistently too low-level and narrow – not focused on transfer, but ‘plugging in’
- Learning how to adapt, grapple with new or unfamiliar elements, uses, or obstacles - i. e. teach them how to learn, transfer - “know what to do when they don’t know what to do”

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On Transfer: “How People Learn,” Chapter 3

- “Transfer is affected by the degree to which people learn with understanding rather than merely memorize sets of facts or follow a fixed set of procedures...”
- “Transfer is enhanced by instruction that helps students represent problems at higher levels of abstraction...”
- “Research shows that transfer across contexts is especially difficult when a subject is taught only in a single context.”
- “Many approaches look equal when the only measure is memory for information. Differences become more apparent when evaluated from the perspective of how well the learning transfer to new problems.”

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MCAS test item: 10th-grade English reading item

A fellow fourth grader broke the news to me after she saw my effort on a class assignment involving scissors and construction paper. “You cut out a purple bluebird,” she said. There was no reproach in her voice, just a certain puzzlement. Her observation opened my eyes—not that my eyes particularly help—to the fact that I am colorblind. In the 36 years since, I’ve been trying to understand what that means. I’m still not sure I do....

Unlike left-handers, however, we seem disinclined to rally round our deviation from the norm. Thus there’s no ready source of information about how many presidents, or military heroes, or rock singers have been colorblind. Based on the law of averages, though, there must have been some. We are everywhere, trying to cope, trying to blend in. Usually we succeed. Until someone spots our purple bluebirds. Then the jig is up.

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The most wrong item on the state ELA test: 71% incorrect!

- This selection is *best* described as
 - A. a biography.
 - B. a scientific article.
 - C. an essay.
 - D. an investigative report.
- Many students said it could not be an essay because “it was funny” and because “it had more than 5 paragraphs.”

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Find lots of ideas in the language of the Standards

Key verbs suggest the important tasks

Key nouns reflect the big ideas

- Important to anchor curriculum in core tasks which recur K-12 to avoid overly-discrete teaching of skills
- Big Ideas frame learning goals through essential questions and understandings

120ff

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LA - US history: middle & high school benchmarks

H-1B-H2: summarizing the process by which the United States was colonized and later became an independent nation;

H-1B-H3: analyzing the development of the American constitutional system;

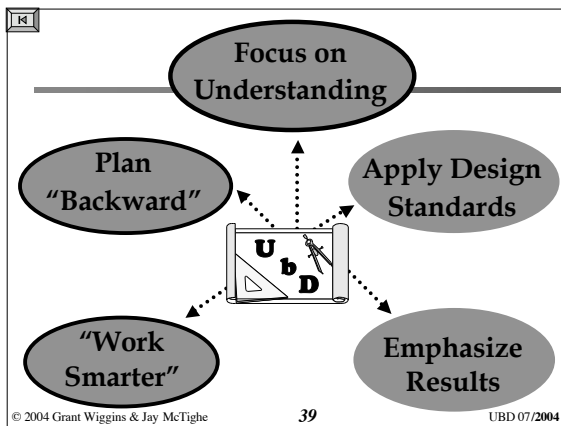
H-1B-M10: analyzing the changes and regional tensions created by Jacksonian democracy, the industrial revolution, increasing immigration, the rapid expansion of slavery, and the westward movement;

H-1B-M11: explaining and giving examples of the reform movements that occurred during the antebellum period and evaluating their impact on American society.

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3 Stages of Backward Design

1. Identify desired results.

2. Determine acceptable evidence.

3. Plan learning experiences & instruction.

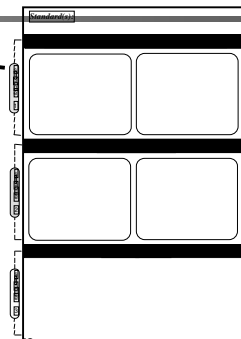
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Backward Design and S.I.P.

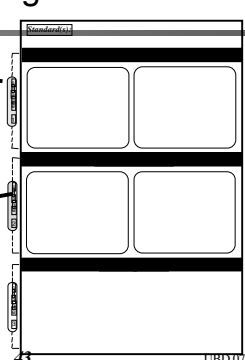
Unpack content standards.



Backward Design and S.I.P.


Unpack content standards.

Avoid fixation on high-stakes tests.



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something to think about...



"High-stakes testing has radically altered the kind of instruction that is offered in American schools, to the point that 'teaching to the test' has become a prominent part of the nation's educational landscape."

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Misconception Alert:




Beware: fixation on test format

"What we see is behavior geared toward improving test scores rather than behavior geared toward changing what students do."

Brian Stecher, researcher at RAND Corporation

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Caution: Don't Confuse the Measure with the Goal.




"Practicing for a standardized test is like practicing for your physical exam!"

- Grant Wiggins

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Caution: Don't Confuse the Measure with the Goal.



- Focus on the important ideas and processes in the content standards.
- Do not fixate on state tests.

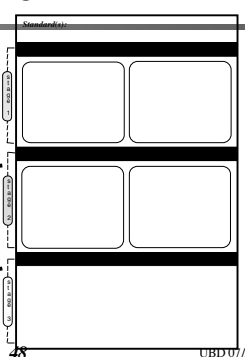
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Backward Design and S.I.P.

Unpack content standards.

Avoid fixation on high-stakes tests.

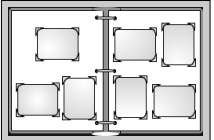
Analyze multiple sources of evidence.



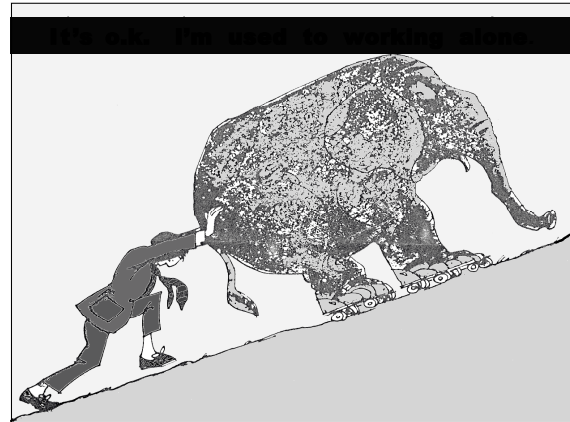
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Think "Photo Album"
versus "Snapshot"

*Reliable assessment requires
multiple sources of evidence,
collected over time.*




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ubdexchange.org 

- electronic "backward design" templates
- searchable database of designs
- web links to other excellent sites
- expert review and feedback based on design standards

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UbD Web Site... 

www.ubdexchange.org

- electronic design tools and UbD Template
- searchable data base of units/ assessments
- on-line tutorials and self-assessments
- on-line feedback and expert reviews
- curriculum mapping capabilities
- ask the authors

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